

Recent Challenges for the Corps of Engineers' Civil Work Program



Increasing Scrutiny

RIVERS OF NO RETURN Which Course for America's Waterways?

Corps' Balancing Act

In Crosscurrents, Engineers Explore 'Greener' Projects

Second of two articles

By MICHAEL GRUNWALD
Washington Post Staff Writer

Native prairie grass grows wild here at Hamburg Bend, one of the few the channelized Mississippi banks erode fast, drop cottonwoods into the water. So shift. Ducks and geese fly in to and loaf in the lazy current.

The three-mile chute at Hamburg looks the way much of the 2,500 look, back when it was truly it was braided and erratic and

back before the Army Corps of Engineers imprisoned it in a slim navigation channel to attract barges that never really came. This is just the kind of natural sidechannel that entranced Meriwether Lewis and William Clark on their historic journey west.

In fact, though, the Hamburg chute is not as "natural" as it seems. The Corps has spent \$4.5 million unblocking it.

HAMBURG, Iowa

THE WASHINGTON POST

THE FEDERAL

Army Corps Delays Study Over Flawed Forecasts

Review Faults Data for Mississippi River Plans

By MICHAEL GRUNWALD
Washington Post Staff Writer

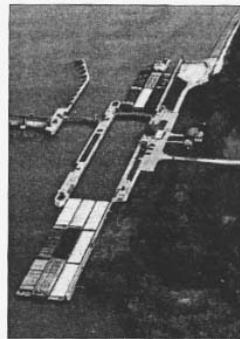
The Army Corps of Engineers has agreed to delay its controversial seven-year study of major construction projects on the Mississippi River, after an independent review concluded the study's forecasts were riddled with serious flaws and unrealistic assumptions.

The Corps had relied on 1993 projections of steadily increasing barge traffic to justify \$1 billion lock expansions on the upper Mississippi, but following completion of the review, officials decided that those projections were obsolete and inflated. The two North Dakota State University economists hired by the Corps to conduct the independent review warned that the numbers are even worse than the agency has acknowledged.

For now, the Corps has requested a one-year delay from the secretary of the Army to redo its estimates.

Controlling the Flow

Since March 1993, the Army Corps of Engineers has been studying proposed navigation improvements in the Upper Mississippi basin.



A barge is split into two sections so it can pass through Lock and Dam 18 as it travels the Mississippi River near Gladstone, Mo.



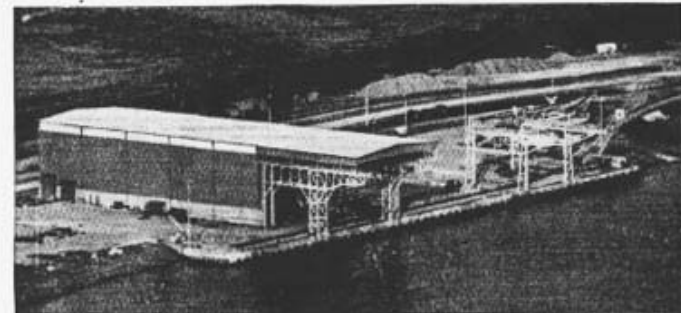
He also asked the Army's inspector general to investigate whether

commendation.

Yesterday, Corps spokesman

"perhaps the weakest part of the entire study," Bitan and Toliver

RIVERS OF NO RETURN America's Troubled Waterways



BY LARRY CLARK/REUTERS THE WASHINGTON POST

The domestication of the Red River made Shreveport a port again—but barges haven't shown up.

A River in the Red

Channel Was Tamed for Barges That Never Came

First of two articles

By MICHAEL GRUNWALD
Washington Post Staff Writer

The Red River used to wander around its valley like an unsupervised child, drifting this way

highways. On the Red, the Corps built five massive dams and 150 jutting dikes, armored quick-to-crumble riverbanks with thousands of tons of sturdy rock revetments, and sliced off 50 miles of serpentine riverbends. For \$2 billion, it reinvented the rambling, treacherous river as a ruler-straight, barge-friendly canal.

The domestication of the Red made Shreveport an



NRC Assessment of Corps Planning Procedures

- **New Directions in Water Resources:
Planning for the U.S. Army Corps of Engineers**
- **National Academy Press, 1999**
- **Requested by Corps of Engineers due to
complaints from project cosponsors**
- **Charge:**
 - Review Corps planning procedures
 - Consider need for major evaluation of P&G
 - Assess implication of WRDA 1986
 - Comment on impacts of use of risk and uncertainty
analysis in Corps planning



NRC Planning Procedures Study Findings

- Corps planning procedures are generally sound and not excessively lengthy compared to private sector planning
- Made recommendations in 4 categories:
 - Internal Organization
 - External Issues
 - Relations with Local Sponsors
 - Analytical Methodology



NRC Assessment of Upper Mississippi River—Illinois Waterway

- **Inland Navigation System Planning: The Upper Mississippi River – Illinois River**
- **National Academy Press, 2001**
- **Requested by the Department of the Army**
- **Charge:**
 - **Review the Upper Mississippi River-Illinois Waterway navigation system feasibility study**



NRC Upper Mississippi River-Illinois Waterway Study Findings

- **Feasibility study represents some important advances for planning studies, but -**
- **Many elements need improvement:**
 - Data and assumptions in spatial equilibrium modeling
 - Careful assessment of non-structural alternatives to decrease waterway congestion
 - Better integration of economics and engineering consideration
- **Conduct the study under an adaptive management paradigm**



GAO Review of Corps Mitigation

■ Section 224(b), WRDA 2000:

Examine the effectiveness of the concurrent mitigation requirements of Section 906 of the Water Resources Development Act of 1986



GAO Review of Corps Mitigation

- Study will examine mitigation activities including:
 - The extent to which mitigation measures are completed before initiating project construction
 - The methods used to monitor and evaluate mitigation projects
 - The Corp's mitigation project design, construction, monitoring and evaluation practices



Legislative Initiatives

**S. 646 and H.R. 1310 – Introduced 3/29/2001
A Bill to Reform the Army Corps of Engineers
would:**

- ❑ Amend Flood Control Act of 1970 to make economic development and environmental protection co-equal goals of water resources planning and development**
- ❑ Require Secretary of Army to revise P&G for water resource projects to reflect these goals**



S. 646/H.R. 1310

- ❑ Require establishment of a stakeholder advisory committee for authorized or modified projects to assist in feasibility studies, general reevaluation studies, and EISs**
- ❑ Require review of specific projects and studies by independent panel of experts where projects:**
 - Have estimated cost of more than \$25 million**
 - Likely to significantly adversely impact fish or wildlife,**
 - Likely to significantly adversely impact local environment, cultural, or other resources**
 - Determined to be controversial**



S. 646/H.R. 1310

- ❑ Require information related to project analysis to be made available to the public on the Internet**
- ❑ Prohibit authorization/substantial modification of a project unless minimizes adverse impacts on natural hydrologic patterns, value, or diversity of wildlife**
- ❑ Amend WRDA 86 to require full and concurrent mitigation of authorized projects**
- ❑ Require keeping of records on wetlands and other habitat types impacted by authorized projects, and available to public**



Corps Restoration Guidance

- **Ecosystem Restoration in Feasibility Studies:**
 - To enhance opportunities to plan, design, construct, operate and maintain environmentally sustainable projects, ecosystem restoration should be included as a study purpose in all future feasibility studies and included explicitly in all future draft study resolutions and draft authorization bills.

Corps of Engineers Memo to Subordinate Commands, May 8, 2001



Corps Restoration Guidance

- **Policy Guidance Letter No. 24 – March 7, 2001**
 - Corps has made fish and wildlife restoration a priority project output.
 - Fish and wildlife restoration recommended only if justified and:
 - » A civil works project has contributed to the degradation (i.e., degradation caused at least in part by a Corps project), or
 - » Restoration can be most cost-effectively accomplished through modification of an existing civil works project (I.e., project modification is an essential element of the restoration).



Corps Restoration Guidance

- » Restoration initiative does not change requirement for formulation and justification of fish and wildlife measures per ER 1105-2-100)
- » Must address significant resources
- » Justification through determination that combined monetary and nonmonetary value of last increment of benefits or losses prevented or replaced exceeds combined monetary and nonmonetary cost of the last added increment of the fish and wildlife restoration measure.
- Due to policy under existing policy constraints, Corps not implementing Section 906(b), 906(e) or 704(b).